

What is claimed is:

1. A self powered pump comprising:

a frame which supports a mounting plate;

5 a marine grade, water cooled diesel engine that is mounted above the plate and having a vertical axis of rotation;

a 90 degree gear box being mounted below the plate that is driven by the diesel motor;

an output shaft of the 90 degree gear box driving a centrifugal water pump whose axis of rotation is horizontal.

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2. The pump of claim 1, wherein:

the frame comprises a pair of side rails located below the mounting plate and inclined uprights which are attached to the side rails, the uprights supporting an instrument panel; the side rails supporting a pair of wheels.

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3. The pump of claim 1, wherein:

the frame comprises a pair of side rails located below the mounting plate and inclined uprights which are attached to the side rails, the uprights supporting an instrument panel; the side rails having mounted on a lower surface of each a stabilising rail.

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4. The pump of claim 1, wherein:

the mounting plate further comprises a rear facing cut-out portion for accommodating the water pump.

5. The pump of claim 1, wherein:

the mounting plate is aluminium and has formed in it a hole for receiving a drive shaft of the motor; and

the mounting plate having mounted to an under-surface, an oil sump.

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6. The pump of claim 5, wherein:

the sump is L shaped.

7. The pump of claim 1, wherein:

10 the gear box is a step-up type.

8. The pump of claim 7, wherein:

the gear box and pump share a common shaft which passes between them.

15 9. The pump of claim 7, wherein:

a common shaft passes between the pump and gear box;

one end of the shaft having mounted on it a first spiral bevel gear having a hub,

the gear box supporting the hub in a bearing.

20 10. The pump of claim 9, wherein:

an input shaft of the gear box carries another spiral bevel gear which meshes with the first spiral bevel gear, the rotation of the bevel gears creating an oil spray which enters an outlet opening and which is delivered from that opening to other parts of the gear box.

11. The pump of claim 1, wherein:

a portion of an output of the pump is diverted to the cooling jacket of the motor.

5 12. The pump of claim 7, wherein:

a gear box end of the shaft is also supported by a tapered roller bearing;

a main housing of the gearbox having affixed to it a mounting plate which includes a well
for receiving a vertical thrust bearing.

10 13. The pump of claim 12, wherein:

the well also retains a radial thrust bearing.

14. The pump of claim 12, wherein:

the thrust bearing supports a thrust collar which is integral with the shaft.

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